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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/622,132 | 10/02/2000 | Martin Rau | R.34873 | 9092 |

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EXAMINER

DINH, TUAN T

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,132

Applicant(s)

RAU ET AL.

Examiner

Tuan T Dinh

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. The request filed on 9/23/02 for a Continued Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 09/622,132 is acceptable and a RCE has been established. An action on the RCE follows.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "...operating device...by a cable and a connector..."claim 11, lines 6-8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 11-24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. The specification is silent regarding "..., and is connected to the control unit by a cable and connector..." claim 11, lines 7-8.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, lines 6-7, it is confuse. Applicant recites a limitation of "...and is connected to the control unit by a cable and connector..." is not understood. Does applicant mean of "the operating device having a cable, and the cable includes a connector, which is connected to the control unit?"

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 11-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Onizuka (U. S. Patent 5,877,944).

As to claims 11, and 25, Onizuka discloses an electronic control unit (column 1, lines 7-8) for use in an automobile, which has operating devices (8, 20, 21, and wire W-see figure 1), which are physically separate from the control unit comprising

a component board (3-figure 1, column 3, line 45) on an assembly side (a surface of a circuit board 3) of which a plurality of electronic modules (7-figure 1, column 3, lines 52-53), are provided, each module having a separate electrical control circuit generates at least one control function (CPU), and is connected to the control unit by a cable having a connector (17-figure 1);

a plurality of connector parts (1a, 1b, 1c-figure 1) are provided with contact elements (terminals 10 and 11) which are disposed separately on the assembly side of the component board (3), and each electronic module (for example, the CPU-7) is assigned at least one connector part (1b; 1c; 1d having terminal 11, 10), which is disposed on the component board (3) in a vicinity of each respective electronic module and is electrically conductively connected to each respective electronic module via line connection (paths 5, column 3, line 50) mounted on the component board (3).

As to claims 12 and 26, Onizuka discloses the electronic control unit as shown in figures 1-7 in which the connector parts (1b) are embodied, connected to the connecting lines of the operating devices (see figure 1), which counterpart connectors being plugged into the connector parts (1b, 1c, 1d) perpendicular to the assembly side of the component board (3).

As to claim 13, Onizuka discloses the electronic control unit as shown in figures 1-7 in which the connector parts (1b, 1c, 1d) are surface-mounted components (SMDs),

and that the contact elements (11) of the connector parts are soldered, by their end portions facing toward the assembly side of the component board (3), to the line connections (5) of the component board (3).

As to claims 14-16, Onizuka discloses the electronic control unit as shown in figures 1-7 in which further line connections (circuitry or paths 5) are provided on the component board (3), which without an interposition of electrical or electronic components (7) electrically connect at least one contact element (11) of one of said plurality of connector part (1b) to another contact element (1b) of the same connector part.

As to claim 17, Onizuka discloses the electronic control unit as shown in figures 1-7 in which electric power components (a plurality of electronic devices 7 can be have electric power components) are mounted directly on the assembly side of the component board (3) and are electrically connected to at least one electronic module and/or at least one connector part (1b) via line connections (5) of the component board.

As to claim 18, Onizuka discloses the electronic control unit as shown in figure 1 in which a common power supply unit (14, column 4, line 51) for all the electronic modules (7) is disposed on the component board (3) and is electrically conductively connected to the electronic modules.

As to claim 19, Onizuka discloses the electronic control unit as shown in figures 1-7 in which a common signal-processing device (7) is disposed on the component board (3) and is electrically conductively connected to the electronic modules.

As to claim 20, Onizuka discloses the electronic control unit as shown in figures 5-7 wherein relatively large passive components (7) are mounted directly on the assembly side of the component board (3) and are electrically conductively connected to the electronic modules (7) via line connections (5) of the component board.

As to claim 21, Onizuka discloses the electronic control unit as shown in figures 1-7 wherein the electrical control circuit (7) of an electronic module includes at least one microprocessor (CPU) for each separate electronic module.

As to claims 22-24, Onizuka discloses the electronic control unit as shown in figures 1-7 wherein the component board (3) is **mounted onto a surface of housing part** (bottom case, 2) of the control unit with the assembly side of the component board mounted facing away from said surface of the housing part.

Response to Arguments

9. Applicant's arguments with respect to claims 11-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maue disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-308-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD
September 28, 2002.


ALBERT W. PALADINI
PRIMARY EXAMINER